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(54) **APPARATUS AND METHOD FOR ENCODING/DECODING TRANSPORT FORMAT COMBINATION INDICATOR IN CDMA MOBILE COMMUNICATION SYSTEM**

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This patent is subject to a terminal disclaimer.

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(58) **Field of Classification Search** ..... None
See application file for complete search history.

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(57) **ABSTRACT**

An apparatus and method for encoding/decoding a transport format combination indicator (TFCI) in a CDMA mobile communication system. In the TFCI encoding apparatus, a one-bit generator generates a sequence having the same symbols. A basis orthogonal sequence generator generates a plurality of basis orthogonal sequences. A basis mask sequence generator generates a plurality of basis mask sequences. An operation unit receives TFCI bits that are divided into a first information part representing biorthogonal sequence conversion, a second information part representing orthogonal sequence conversion, and a third information part representing mask sequence conversion and combines an orthogonal sequence selected from the basis orthogonal sequence based on the second information, a biorthogonal sequence obtained by combining the selected orthogonal sequence with the same symbols selected based on the first information part, and a mask sequence selected based on the biorthogonal sequence and the third information part, thereby generating a TFCI sequence.

88 Claims, 18 Drawing Sheets